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# INIS ATOMINDEX

AN INTERNATIONAL ABSTRACTING SERVICE

# ИНИС АТОМИНДЕКС

CUMULATIVE INDEX

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Part: 1

Personal Author Index A–L



INTERNATIONAL ATOMIC ENERGY AGENCY, VIENNA, 1979



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\* Countries marked by an asterisk are those that by the day of edition of this document had formally indicated their willingness to participate in the International Nuclear Information System (INIS).

In addition the following international and regional organizations have formally accepted an invitation to participate in INIS:

Commission of the European Communities (CEC)  
 Council for Mutual Economic Assistance (CMEA)  
 European Organization for Nuclear Research (CERN)  
 Food and Agriculture Organization of the United Nations (FAO)  
 International Atomic Energy Agency (IAEA)  
 International Commission on Radiological Protection (ICRP)  
 International Organization for Standardization (ISO)  
 Joint Institute for Nuclear Research (JINR)  
 Nuclear Energy Agency (NEA)  
 Organization of African Unity (OAU)  
 United Nations (UN)  
 World Energy Conference (WEC)  
 World Health Organization (WHO)

The Agency's Statute was approved on 23 October 1956 by the Conference on the Statute of the IAEA held at United Nations Headquarters, New York; it entered into force on 29 July 1957. The Headquarters of the Agency are situated in Vienna. Its principal objective is "to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world".

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# INTRODUCTION

## The International Nuclear Information System (INIS)

INIS is a cooperative, decentralized information system set up by the International Atomic Energy Agency and its Member States. Its purpose is to construct a data base identifying publications relating to nuclear science and its peaceful applications. Member States and cooperating international organizations scan the scientific and technical literature published within their boundaries or by them, select from it those items which fall within the subject scope of INIS<sup>1)</sup> and process the data according to the agreed standards and rules. Document descriptions, abstracts and, in certain cases, full texts of the literature are then submitted to the IAEA Headquarters, where those data are merged and the INIS output products compiled. The following services are issued:

- The INIS magnetic tape service
- INIS Atomindex: a semi-monthly abstracting journal<sup>2)</sup>
- INIS non-conventional literature on microfiche<sup>3)</sup>

## Availability and price of INIS services

### MAGNETIC TAPE SERVICE

This semi-monthly service, providing magnetic tapes containing all records submitted to the system, is available only to participating Member States and International Organizations. National INIS centres in many countries are utilizing INIS tapes in the provision of national information services. Available services vary from country to country and interested persons are requested to contact their national INIS Liaison Officer whose name and address appear in the list beginning on page XI.

### INIS Atomindex

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Austrian Schillings 900,-  
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<sup>1)</sup> The scope of INIS is defined by the scope of the IAEA's interests. Full details of the INIS scope are printed in IAEA-INIS-3, INIS: Subject Categories and Scope Descriptions. This is a publication in the INIS Reference Series which defines the standards and rules for INIS. Copies of all documents in the INIS Reference Series are available from the IAEA, Vienna.

<sup>2)</sup> INIS Atomindex is prepared from the semi-monthly INIS magnetic tapes by computer-driven photocomposition methods. The bulk of the information contained in the magnetic tapes is printed in INIS Atomindex. The major exception to this are the subject descriptors, whose main use is for computer-searching. These are omitted from all INIS Atomindex entries that are accompanied by abstracts.

<sup>3)</sup> In INIS, "non-conventional literature" is defined as all literature other than journal articles or commercially published books.

Orders should be sent to:

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## BACK ISSUES

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## CUMULATIVE INDEXES

Cumulative indexes to INIS Atomindex are published twice yearly covering the twelve issue indexes published in the months of January to June and July to December. The present Cumulative Index covers issues 13-24 of Vol.10 i.e. the issues published from 1 July to 15 December 1979. It consists of:

- Part 1: Personal Author Index: A-L;
- Part 2: Personal Author Index: M-Z;
- Part 3: Corporate Entry Index,  
Conference Index,  
Report, Standard and Patent Number Index;
- Part 4: Subject Index: A-L;
- Part 5: Subject Index: M-Z.



Previous Cumulative Indexes have been published, as follows:

Issues Covered	Price
Vol. 1, No. 1—Vol. 3, No. 4	Austrian Schillings 216,—
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Vol. 5, Nos. 1—12	Austrian Schillings 135,—
Vol. 5, Nos. 13—24	Austrian Schillings 135,—
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Vol. 8, Nos. 13—24	Austrian Schillings 325,—
Vol. 9, Nos. 1—12	Austrian Schillings 325,—
Vol. 9, Nos. 13—24	Austrian Schillings 325,—
Vol. 10, Nos. 1—12	Austrian Schillings 337,—
Vol. 10, Nos. 13—24	Austrian Schillings 337,—

Back copies of the above are still available. In addition, a 5-year Cumulative Report, Standard and Patent Number Index, Covering Vol.3, No.5—Vol.8, No.12, is available. Price: Austrian Schillings 128,—.

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#### How to use this Cumulative Index

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RN 459655—RN 462062	Vol.10, No.13
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RN 463866—RN 466989	Vol.10, No.15
RN 466990—RN 471195	Vol.10, No.16
RN 471196—RN 474401	Vol.10, No.17
RN 474402—RN 477567	Vol.10, No.18
RN 477568—RN 480957	Vol.10, No.19
RN 480958—RN 482979	Vol.10, No.20
RN 482980—RN 485262	Vol.10, No.21
RN 485263—RN 488531	Vol.10, No.22
RN 488532—RN 492383	Vol.10, No.23
RN 492384—RN 495330	Vol.10, No.24

#### Personal Author Index

The name of each personal author of every document cited is listed in the form in which it appears in the main entry. Hence, an author's name may appear more than once, depending on whether a forename is spelled out or only initials are given. Note also that names preceded by "name fragments", such as "de", "van", "von", etc., may appear either under the name fragment or under the main part of the name, depending on local practices for treating such names.

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Examples:

- Berg, B.**  
Additional conservation laws in the Thirring model. 264528  
Particle number conservation in the massive Thirring model. 264527
- Berg, C.J.M. van den**  
Coded aperture imaging and the introduction of the modulated zone plate in nuclear medicine. (CEA—CR—6) 251473  
A refocussing filter based on Fridman's theorem, applied to Tl-201 myocardial scintigrams. (CEA—CR—6) 251497
- Van De Woestijne, K.P.**  
Horizontal gradient in ventilation distribution due to a localized chest wall abnormality. 255646
- Van den Berg, J.A.**  
Equilibrium studies of the uranyl oxalate system in acidic aqueous solution. 270151

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Each entry gives the full title of the document for which the corporate body is responsible, and the RN for the main entry of that document. If the document is a technical report or patent document the report number or patent document number is given in brackets, following the title.

Examples:

- Agence Nationale de Valorisation de la Recherche (ANVAR), 92 — Paris-Defense (France)**  
Process and devices of detection of hard electromagnetic or particle radiations using a superconducting element. 433824  
Process for obtaining oxygen doped zinc telluride monocrystals and scintillator crystals obtained by this process. 444113  
System for the high speed cathodic spraying of a deposit. 432647
- Anderson (M.D.) Hospital and Tumor Inst., Houston, TX (USA)**  
Radiation and biophysical studies on cells and viruses. Progress report 1 July 1977 — 30 June 1978. (ORO — 2832-192) 436972
- ANVAR, 92 — Paris-Defense (France)**  
See Agence Nationale de Valorisation de la Recherche (ANVAR), 92 — Paris-Defense (France)
- Applied Decision Analysis, Inc., Menlo Park, CA (USA)**  
Methodology and preliminary models for analyzing nuclear safeguards decisions. (UCRL — 13931) 459620
- Applied Nucleonics Co., Inc., Los Angeles, CA (USA)**  
Summary of seismic assessment of underground and buried nuclear power plants. (ATR — 78(7652-012) 437244
- Arbeitsgemeinschaft Versuchs-Reaktor G.m.b.H., Duesseldorf (Germany, F.R.)**  
10 years of electricity generation with the pebble bed reactor of AVR. (INIS-mf — 4910) 452767

#### Conference Index

This index is divided into two parts. The first part is arranged in chronological order by the date of the meeting. Other information given includes the place (city or town) where the meeting was held, the name of the meeting, and the RN's of the main entries for all documents presented at, or resulting from the meeting and listed in the issues of INIS Atomindex covered by this cumulation.

The second part of the index repeats the above information but this time the entries are arranged in alphabetical order by the name of the place in which the meeting was held.

Examples:

- 76 Mar 1. Toulouse, France.** International colloquium on solar electricity. 293922.
- 76 Mar 2. Golden, CO, USA.** Interagency Mechanical Operations Group meeting. 283257, 284029.
- 76 Mar 9. Dublin, Ireland.** International conference on physics in industry. 297370, 297379, 297384, 297541, 298153, 298173, 298178, 298182, 298205, 298744, 299136, 299319, 299353, 299364, 299477, 299831, 299921, 299944, 300058.
- Glasgow, UK. 76 Apr 7.** Annual Chemical Congress. 287782.
- Goettingen, Germany, F.R. 75 May 26.** 4. German symposium on nuclear law. 290006, 290325, 290329, 290341, 290346, 290349, 290350, 291073, 291075, 291076, 291077, 291078, 291079, 291080, 291081, 291082, 291083, 291084, 291085, 291086, 291087, 291088, 291089, 291090, 291091, 291093, 291094.
- Golden, CO, USA. 76 Mar 2.** Interagency Mechanical Operations Group meeting. 283257, 284029.

#### Report, Standard and Patent Number Index

Entries for publications are arranged according to the number assigned to them by the organizations or institutions responsible for their production or distribution. If a document has not been assigned a reference number at the source, it is assigned an INIS-mf— number by the INIS Secretariat. Patent numbers are listed under the general heading PATENTS.

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Examples:

- CEA-CONF**  
CEA-CONF—3695 313867 Copies available from Service de Documentation, CEN Saclay, BP No2, 91190 Gif-sur-Yvette (France).
- D**  
D-456228  
See N—76-22136
- DIN**  
DIN—25403(Pt.4) 315707 Publisher
- DOCKET-STN-5056**  
DOCKET-STN-50568—1 316143 INIS
- DP**  
DP—1452 315036 INIS



## Subject Index

Each document listed in INIS Atomindex is entered under one or more alphabetically listed subject headings. These are constructed from descriptors selected from among those assigned to the magnetic-tape record for the document, and usually consist of a pair of descriptors, one used as a main heading and the second as a qualifier of that main heading. The main headings are selected to describe as specifically as possible an important concept in the document, and the qualifiers are selected to provide further information about the main heading. Occasionally, a document is so general or covers so many aspects of the concept represented by the main heading that the use of a qualifier is not appropriate. The full index entry includes, in addition to the title of the document, the one or more subject categories that have been assigned to the document (printed in brackets), and the RN of the main entry for the document. Additional information on the content of the document may be included within the brackets with the categories as an augmentation of the title.

The subject index also includes references from terms not adopted for indexing to the approved terms (descriptors) under which information may be found (see references); see also references are intended to guide the index user from one subject heading to another under which related material may also be indexed.

For additional guidance to subject headings under which references of interest might be found, see INIS: Thesaurus (IAEA-INIS-13).

Examples:

### ALVEOLI (PULMONARY):

See LUNGS

### AMERICIUM:

electric conductivity

The electrical resistivity of  $^{241}\text{Am}$  metal. (B22). 354557

### AMERICIUM COMPOUNDS:

ion exchange chromatography

Separation of Am, Cm and rare-earths on the colloidal fraction of an anion-exchange resin deposited on an inert carrier. (B13). 354400

Separation of Am, Cm and rare-earths by continuous two-dimensional ion-exchange chromatography. (B13). 354405

### AMERICIUM ISOTOPES:

See also AMERICIUM 241

### AMERICIUM 241:

clearance

Decorporation of  $^{241}\text{Am}$  and  $^{252}\text{Cf}$  by Ca-DTPA from rat, Syrian and Chinese hamster. (C21). 354868

electric conductivity

The electrical resistivity of  $^{241}\text{Am}$  metal. (B22). 354557

internal irradiation

The dosimetry of  $^{241}\text{Pu}$  reconsidered. (C55). 355044

### AMIDES:

See also ACRYLAMIDE

### AMINES:

See also ANILINE; HYDROXYLAMINE; TRYPTAMINES

liquid column chromatography

Use of high performance liquid chromatography to separate very small quantities of radio-labelled metabolites from biological tissue. (C42; Acaricides; amitraz). 354909

### AMINO ACIDS:

See also CYSTEINE; DTPA; FOLIC ACID; KYNURENINE; THYROXINE; TRYPTOPHAN

### AMINO BENZENE:

See ANILINE

### AMMONIA:

electron-molecule collisions

Differential cross sections for 35keV electrons elastically scattered from  $\text{NH}_3$ . (A12). 353297

### AMMONIUM COMPOUNDS:

neutron diffraction

Studying the rotation of the  $\text{NH}_4$  ion in ammonium chloride by means of high-resolution neutron spectroscopy. (A13; B12). 353495

## How to obtain copies of the documents cited in INIS Atomindex

Copies of the technical reports, conference preprints, patents, standards and theses (i.e. non-conventional literature) are normally available in microfiche format from the INIS Clearinghouse. For those items of non-conventional literature which are not available from the INIS Clearinghouse, both the main entry and the Report, Standard and Patent Number Index entry provide information regarding availability from another source or in another form.

Most of the conventional, commercially published literature abstracted in INIS Atomindex, including books and journal articles, may be found in major libraries around the world. For publications issued in particular countries, enquiries should be made to the organizations listed below. However, enquirers having difficulty in obtaining access to any of the literature cited in INIS Atomindex should seek the assistance of the national INIS Liaison Officer in their country (a list of the Liaison Officers is given beginning on page XI).

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Source: The Library  
Centre d'Etude de l'Energie Nucléaire  
CEN/SCK, Boeretang 200  
B-2400 Mol  
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Source: Service de Vente de l'Imprimerie Nationale  
Route d'Auby, 59128 Flers-en-Escrebieux

Availability: Patents. Price: FF 5.00 (+postage)

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Availability: Photocopies of all South African non-conventional literature and journal articles: free of charge

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Reports (full size): prices as per catalogue (see editorial service: *Revista Energía Nuclear*)

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## Switzerland

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Source: INIS Liaison Officer for Turkey  
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## Union of Soviet Socialist Republics

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- Scaling pressure and subcooling for countercurrent flow. Quarterly progress report, April 1, 1978 - June 30, 1978. (NUREG/CR-0464) 466326
- Crowley, J.H.**  
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- Judge, D.L.**  
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